BRIEF IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI.

THE OPINIONS OF THE COURTS BELOW.

The opinion of the Circuit Court of Appeals appears at 111 F.(2d) 728, and in the record herein at 5 R. 1560-1572, inclusive; the District Court minute orders for entry of decrees for plaintiff appear in the record herein at 1 R. 118 (as to Equity No. 4090-R) and 1 R. 170 (as to Civil Action No. 21,067-R).

JURISDICTION.

The jurisdiction of this Court is invoked under Section 240(a) of the Judicial Code as amended by the act of February 13, 1925; 28 U.S.C. 347(a); and also by reason of diversity of decision with respect to grave and important rules of patent law.

The decision of the Circuit Court of Appeals for the Ninth Circuit is in conflict with the decisions of this Court and of other Circuit Courts, as seen by the several cases noted supra, pages 14 and 15, in petitioner's assignments of error.

PETITION FOR REHEARING.

A petition for rehearing herein was denied by the Circuit Court of Appeals for the 9th Circuit on June 11, 1940 (5 R. 1574).

STATEMENT.

The controlling facts, together with the questions herein involved and the assignments of error, appear sufficiently set out in the petition.

ARGUMENT.

This case, it is respectfully urged, squarely presents a conflict between corresponding controlling decisions of this Court and the decisions of the various Circuit Courts of Appeals in the United States that have from time to time considered the question of generic chemical claims in patents.

For the first time, as far as we have been able to determine, in the application of the patent statutes, principles of law have been announced which seemingly stand alone, and which, if allowed to stand, effectively determine (a) that the inventor of a new chemical admixture may not claim his invention generically, by claiming chemical ingredients as a **class,** but on the contrary must limit his claims to **specific ingredients** with which he has worked although no members of the class is shown not to be operative for the purpose desired; and (b) that he may not employ terms of function or result in stating quantities or proportion of the ingredients employed.

This Court, as well as the Patent Office tribunals, has long held that in order to claim a **class** of ingredients generically, it is sufficient that the patentee

disclose a reasonable number of members of the class in his specification, **provided** that it is not shown that any member of the class is inoperative to secure the desired result (*Corona v. Dovan,* 276 U.S. 358, 385). This has also been the prevailing ruling of most of the various Circuit Courts of Appeal; and, as recently as November, 1939, less than six months prior to the ruling in the instant case, the Ninth Circuit Court, by a different group of judges from those deciding the instant case, so ruled in *Research Products Co. v. Tretolite,* 106 F.(2d) 530, thereby following what has long been thought to be established law.

I.

THE NINTH CIRCUIT COURT RULE IS AT VARIANCE WITH A UNIFORM LINE OF DECISIONS IN THE SUPREME COURT.

The number of cases in this Court where the subject of the sufficiency or insufficiency of chemical or composition of matter patent claims is discussed is not great; but none of those cases where the matter has been passed upon supports the Ninth Circuit Court of Appeals rule. This Court's position on the subject is not materially different from what it was a hundred years ago, when the first cases came before it. The leading cases, of course, include *The Incandescent Lamp Patent,* 159 U.S. 465; the *Holland Glue* case, 277 U.S. 245; *Corona v. Dovan,* 276 U.S. 358; and the recent case of *General Electric Co. v. Wabash,* 304 U.S. 364.

Since the Court of Appeals based its judgment mainly on the *General Electric* case, we will refer to that case first, to show how it is clearly differentiated from the instant cases.

> *General Electric Co. v. Wabash Co.,* 304 U.S. 364 (overruling the 9th C.C.A., 80 Fed. (2d) 958, on Pacz Patent).*

(In Appendix B hereto we have sufficiently referred to the disclosures and claims of the Lindstaedt and Turnbow patents to show their extent, character and form.)

An analysis of the *General Electric* case and of the claims there in issue and of the facts pertaining thereto, shows conclusively, we respectfully submit, a clear distinction between that case and the present one.

As this Court there indicated (page 368), a typical claim in issue read:

> " '25. A filament for electric incandescent lamps or other devices, composed substantially of tungsten and made up mainly of a number of comparatively large grains of such size and contour as to prevent substantial sagging and offsetting during a normal or commercially useful life for such a lamp or other device.' "

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*It is significant that His Honor Judge Haney, who wrote the opinion in the instant case, also wrote the opinion in the companion case on the Pacz Patent, entitled *Anraku v. General Electric Co.*, 80 F.(2d) 958, which was overruled in the *General Electric v. Wabash* case.

Certiorari was granted in the *General Electric* case, for one reason, no doubt, that the Court of Appeals in the Second Circuit predicated its decision on the testimony of a number of witnesses where neither their testimony nor the substance of the evidence to which their testimony was directed, was before the Court in the *Anraku* case.

This Court, in holding that this claim failed to make a disclosure sufficiently definite to satisfy the requirements of the patent statutes, said (page 369):

> "Patentees may reasonably anticipate that claimed inventions, improvements and discoveries, turning on points so refined as the granular structure of products, require precise descriptions of the new characteristic for which protection is sought. In a limited field the variant must be clearly defined."

And in further criticism of the claim the Court said (page 371):

> "The claim uses **indeterminate adjectives** which describe the function of the grains to the **exclusion of any structural definition,** and thus falls within the condemnation of the doctrine **that a patentee may not broaden his product claims by describing the product in terms of function.** Claim 25 vividly illustrates the vice of a description in terms of function."

FUNCTIONAL CLAIMS PERMISSIBLE.

This Court, however, recognized permissive and beneficial use of functional terms and said (page 371):

> "A limited use of terms of effect or result, which accurately define the essential qualities of a product to **one skilled in the art,** may in some instances be permissible and even desirable, but a characteristic essential to novelty may not be distinguished from the old art solely by its tendency to remedy the problems in the art met by the patent."

THOSE "SKILLED IN THE ART" NOT INFORMED.

Further, the Court said (page 372):

> "And we may doubt whether the language used in Claim 25, taken by itself, conveyed definite meaning to those skilled in the art of incandescent lighting."

In short this Court pointed to the inherent deficiencies of both the claim and the specifications in that neither the claim nor the specification gave the necessary information for those "skilled in the art". That, of course, is fatal in any case. It was fatally defective in the very place where it should have been explicit.

As showing how little the Pacz specification and claim taught, the Court appended this footnote on page 372:

> "There is no showing whether, under established principles in the science, the language indicated grains extending across the width of filament, and if so whether the boundaries were irregular, or regular but not perpendicular to the axis of the filament; or whether the language indicated grains larger than the fine grains of Coolidge's thoriated filament but not large enough to extend across the entire section, and if so what type of boundaries existed.
>
> "Indeed, those merely skilled might have suspected the absence of crystals large enough to extend across the entire section of the filament, in view of the efforts of other patentees to avoid such crystals, * * *."

That the Pacz patent was recognized as unusual is apparent from the quotation at page 372, where this Court said:

> "The Circuit Court of Appeals below suggested that 'in view of the difficulty, if not impossibility, of describing adequately a number of microscopic and heterogeneous shapes of crystals, it may be that Pacz made the best disclosure possible, * * *.'"

CLAIMS TO BE READ WITH REFERENCE TO THE SPECIFICATION.

This Court recognized the well known rule that claims are to be read **by reference to the descriptive parts of the specification.** It was pointed out that the Pacz patent, apparently, did not describe the invention any better in the specification than in the claims, saying (page 373):

> "Assuming that in a proper case a **claim may be upheld by reference to the descriptive part of the specification** in order to give definite content to elements stated in the claim in broad or functional terms, the specification of the Pacz patent does not attempt in any way to describe the filament, except by mention of its coarse-grained quality."

Note: The indefiniteness of the Pacz patent is shown from the very statement in the patent itself (lines 60-62):

> "The probable reason why filaments made according to my invention do not sag is that the structure is comparatively coarse grained."

The astonishing fact is that in the only three respects, viz., **grain size, grain contour and extent of sag,**

in which the product of the patent purported to differ from the prior art, **neither the specification nor the claims defined, nor so much as suggested, any limits.**

That patent set up no standard by which the extent of the claimed monopoly could be made. That was left entirely to experiment based assumedly on the utility of the product. **In other words, according to the patent and to the claim, it was only necessary that the tungsten wire should be commercially useful.** No such extraordinary situation is supported by common sense or legal authority, and it is not surprising that the Court found the claim invalid, because of want of limitations as to size, contour, etc., of the tungsten grains.

We only need to contrast what has been said above with the Lindstaedt claims and the Lindstaedt patent to recognize the points of substantial differentiation.

II.

ESSENTIALS OF A COMPOSITION-OF-MATTER PATENT.

In the *Holland Glue* case, 277 U.S. 245, 254, the Court had before it three claims, which read (page 250):

> "28. A glue comprising cassava carbohydrate rendered semifluid by digestion and having substantially the properties of animal glue.
>
> "30. A wood and fiber glue formed of a starchy carbohydrate or its equivalent by union therewith of about 3 parts or less by weight of water and alkali metal hydroxid.

"31. A wood and fiber glue containing amylaceous material as a base dissolved without acid in about three parts of water or less, and being viscous, semifluid and unjellified."

Analyzing these claims, the Court then said (pages 250-251):

"* * * in point of substance the product claims in suit are for a starch glue which, combined with about three parts or less by weight of water, will have substantially the same properties as animal glue."

In holding these claims deficient in substance the Court said (pages 254-255):

"It was necessary that the Perkins patent, so far as it is a patent of a **composition of matter,** should contain some description of the ingredients entering into the composition which would both define the invention, *Grant v. Raymond,* 6 Pet. 218, 247; *Wood v. Underhill,* 5 How. 1, 5; *Tyler v. Boston,* 7 Wall. 327, 330; *Bene v. Jeantet,* 129 U.S. 683; *Howard v. Detroit Stove Works,* 150 U.S. 164, 167, and carry it beyond the previous development of the art. Had Perkins claimed only a glue made of starch dissolved in three parts of water with an alkali, he would not have advanced beyond the Gerard and Dornemann patents and subsequent practice. * * *

"Perkins' real invention, apart from the combination of his first and second step processes, with which we are not now concerned, was that by the use of a particular kind of starch as an ingredient a new composition of matter was made for which he claimed his patent. * * *

> "As described the starch ingredients fell short of dextrine or soluble starch, but was of lower water absorptivity than petitioner's glue base. The glue made of this ingredient within the specified range was a new product. This was invention of a new composition of matter and was the real contribution Perkins made to the art.
>
> "* * * There can be no description of a composition of matter without some designation of its ingredients."

Turning to the cases cited above, we find that in *Grant v. Raymond* (1832), this Court first authoritatively established the right of a patentee to surrender an issued patent and have it reissued, in case of a **defective or insufficient** specification, so that it might be made sufficient in conformity with the patent statute.

In *Wood v. Underhill et al.* (1847), supra, the patent was for a composition, and the patentee admitted (page 2):

> "that clay which requires the most burning will require the greatest proportion of coal-dust; the exact proportion, therefore, cannot be specified; but, in general, three-fourths of a bushel of coal-dust to one thousand brick will be correct. Some clay may require one-eighth more, and some not exceeding a half-bushel."

It was contended (page 4) that the specification was uncertain and insufficient. Chief Justice Taney, however, **upheld** the patent and, in doing so, gave an indication of the sound rule which for ninety odd

years was thought to be the rule in "composition patent" cases until the Ninth Circuit Court spoke to the contrary in the instant case. Thus Chief Justice Taney said (page 4):

> "The degree of certainty which the law requires is set forth in the act of Congress. The specification must be in such full, clear, and exact terms as to enable any one skilled in the art to which it appertains to compound and use the invention; that is say, to compound and use it without making any experiments of his own."

And continuing (page 5):

> "But when the specification of a new composition of matter gives only the names of the substances which are to be mixed together, without stating any relative proportion, undoubtedly it would be the duty of the court to declare the patent to be void. And the same rule would prevail where it was apparent that the proportions were stated ambiguously and vaguely. For in such cases it would be evident, on the face of the specification, that no one could use the invention without first ascertaining by experiment the exact proportion of the different ingredients required to produce the result intended to be obtained. And if the specification before us was liable to either of these objections the patent would be void, and the instruction given by the Circuit Court undoubtedly right.
>
> "But we do not think this degree of vagueness and uncertainty exists. The patentee gives a certain proportion as a general rule; that is three-fourths of a bushel of coal-dust to one thousand bricks. It is true he also states that clay which

> requires the most burning will require the greatest proportion of coal-dust; and that some clay may require one-eighth more than the proportions given, and some not more than half a bushel instead of three-fourths. The two last-mentioned proportions may, however, be justly considered as exceptions to the rule he has stated; and as applicable to those cases only where the clay has some peculiarity, and differs in quality from that ordinarily employed in making bricks. Indeed, in most compositions of matter, some small difference in the proportions must occasionally be required, since the ingredients proposed to be compounded must sometimes be in some degree superior or inferior to those most commonly used. In this case, however, the general rule is given with entire exactness in its terms; and the notice of the variations, mentioned in the specification, would seem to be designed to guard the brick-maker against mistakes, into which he might fall if his clay was more or less hard to burn than the kind ordinarily employed in the manufacture."

And the Justice says in conclusion that this matter of sufficiency is a question of fact: "* * * a question to be decided by a jury, upon the evidence of **persons skilled in the art** to which the patent appertains."

The Appellate Court here ignored a **complete absence** of any such proofs but held that patent insufficient as a **matter of judicial opinion.**

To paraphrase the argument of Mr. Silliman in *Wood v. Underhill* (page 3): neither the defendant here nor the manufacturer of the infringing product, Kon-Trold Nicotine, had any difficulty in understand-

ing and following the teachings of the Lindstaedt and Turnbow patents "is pretty good evidence that the manufacturer has been able to discover something from plaintiff's specification".

The case of *Tyler v. Boston* (December, 1868), the third case cited above in the *Holland Glue* case, embraced a claim which read (7 Wall. at 328):

> "the compound produced by the combination of the mineral or earthy oils with fusel oil, in the manner and for the purpose substantially as herein set forth; said compound constituting a new manufacture."

The Court at once pointed out the fatal defect residing on the face of the patent, saying (page 330):

> "The patent states that 'the exact quantity of fusel oil which is necessary to produce the most desirable compound must be determined **by experiment'.**" (Blackface by the Court.)

Then the Court drew a clear distinction between cases where an art was developed, and there were those "skilled in such art", and where there was an absence of those skilled in the art, saying:

> "Where a patent is claimed for such a discovery, it should state the component parts of the new manufacture claimed with clearness and precision, and not leave the person attempting to use the discovery to find it out 'by experiment'. The law requires the applicant for a patent-right to deliver a written description of the manner and process of making and compounding his new-discovered compound. The art is new; and therefore persons cannot be presumed to be skilled in

it, or to anticipate the result of chemical combinations of elements not in daily use."

Howard v. Detroit Stove Works, 150 U.S. 164, 167 (1893), was a mechanical patent case, and had to do with the failure of the patentee to give any dimensions to an element known as a "flange", assertedly performing some additional function but failing to differentiate from the prior art, when it was shown that there were already stoves with flanges.

Cochrane v. Badische Anilin & Soda Fabrik, 111 U.S. 293, 310, recognized the negative rule in regard to composition claims: that such composition must be recognized by **description other than by the process for making it.**

The claim there involved reads (page 296):

"Artificial alizarine, produced from anthracine or its derivatives by **either of the methods herein described, or by any other method which will produce a like result.**"

The Court said (page 310):

"Every patent for a product or composition of matter must identify it so that it can be recognized aside from the description of the process for making it, or else nothing can be held to infringe the patent which is not made by that process."

III.

THE NINTH CIRCUIT ERRONEOUSLY GROUPED ALL OF THE CLAIMS OF BOTH PATENTS UNDER THEIR BAN, INSTEAD OF EVALUATING THE CLAIMS SEPARATELY.

"Claims are independent inventions. One may be infringed, others not * * * One claim may be valid, all the rest invalid. * * * In such cases the patent does not stand or fall as a unity." *Leeds & C. Co. v. Victor Talking Machine Co.*, 213 U.S. at 319.

"Each claim is, in effect, a separate and distinct patent." *United Nickel Co. v. Central Pacific R. Co.*, 36 Fed. 186, 188.

IV.

THE APPELLATE COURT'S DECISION TO THE EFFECT THAT A PATENTEE MAY NOT HAVE BROAD CLAIMS AS WELL AS NARROW CLAIMS IN THE SAME PATENT CONTRAVENES LONG-ESTABLISHED PATENT LAW, AS SEEN, FOR INSTANCE, IN ZITTLOZEN v. BOSS, 219 FED. 887, 892 (8 C.C.A.); AND RYDER v. TOWNSEND, 188 FED. 792, 807.

In the last mentioned case it was said:

"And when an inventor makes an invention and in his specifications points out a specific construction he may claim the specific construction and also have a general broad claim, and when this is done, in order to sustain the broader claim, it is not necessary for the patentee to point out in his patent that the specific construction shown is not essential to the invention. The law gives him ample protection whether he does or not. Machine Co. v. Murphy, 97 U.S. 120, 125, 24 L. Ed. 935; Int. T. R. Co. v. Dey et al. (Second Circuit), 142 Fed. 736, 744, 745, 74 C.C.A. 68, 76, 77."

V.

PETITIONERS' CLAIMS NOT OBJECTIONABLE TO THE POINT OF INVALIDITY IN ALLEGEDLY CLAIMING A CLASS, AS AGAINST CLAIMING A SPECIFIC MEMBER OF THE CLASS, IN THE ABSENCE OF A SHOWING THAT AT LEAST SOME MEMBERS OF THE CLASS WOULD NOT WORK.*

The Incandescent Lamp case, 159 U.S. 465.

The case is referred to at this point because it shows at once the failure of the Ninth Circuit to appreciate the **exception** to the rule announced by it, i. e., the absence of any showing that any members of the class or classes announced by Lindstaedt will not work.

This Court in the *Incandescent Lamp* case voiced the rule which it has applied consistently ever since the beginning of the American patent system as a test of the propriety of claims drawn to a chemical class.

In that case the patentee discovered a method of producing an incondescent lamp filament by means of carbonizing paper. The specification of the patent disclosed **only** a method of carbonizing paper and the **single product,** carbonized paper. This Court pointed out the limitations of the disclosure of the specification, saying, quoting the specification:

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*The Ninth Circuit Court in this connection ruled (5 R. 1570-2):

"There are a great many alkaloidal substances, and Lindstaedt and Turnbow, could not, by the simple expedient of claiming a compound of alkaloidal substances and colloidal substances, obtain a monopoly of a countless number of compounds, which could be made from these immense classes of substances. * * *

"An entire **class** of ingredients is specified not specific 'ingredients'. The quantity or proportion of the class is not specified except 'in conveniently functional language'.

"The instant case is one illustrative of the practice followed in many patents. The inventors experimented with and compounded particular alkaloidal substances with particular colloidal substances. Instead of confining their claims to that which they actually discovered, they attempted to monopolize all parasiticides which could be made from the entire class of alkaloidal substances with the entire class of colloidal substances. We think the patent law is not so benevolent, * * *"

> "In the practice of our invention we have made use of carbonized paper, and also wood carbon" (page 467).

Despite the fact that the patentees had disclosed only a single member of the class of fibrous or textile materials, three generic claims had been obtained, two of which were broadly directed to and **claimed the classes of "fibrous or textile materials"** for the purpose of producing the incandescent conductor or filament.

Subsequently the defendant, operating under a disclosure of Thomas Edison, was charged with infringement, and at the trial it was shown that Edison had **experimented with more than 6000 members** of the class of "fibrous or textile materials" and found **all of the members of the class to be inoperative except paper** (as disclosed by the patent), **bamboo, and one other substance.** This Court thereupon ruled that in order to claim a class generally, more than one member of the class must be disclosed in the specification as operative for the purpose, and no member of the class should be shown to be inoperative.

We desire again to call the attention of this Court to the fact that there is **no showing whatever in the instant case that any member of the classes of alkaloids, on the one hand, or substances of colloidal nature, on the other, is inoperative to carry out the teachings of Lindstaedt.**

The Court itself, in the excerpt from the opinion quoted at page 5, supra, indicated its clear under-

standing that there was some general quality* running through the colloid class which made colloids satisfactory for the purpose intended by Lindstaedt.

Therefore, meeting the objection in the *Incandescent Lamp* case, examination of the Lindstaedt specification shows that numerous alkaloids and alkaloidal salts (namely the alkaloids nicotine and coniine and the sulphate and nitrate salts of each) are specifically named in the specification as typical of the class of toxic substances which will act as suitable parasiticides (Lindstaedt 1:2:3-5). With reference to substances of colloidal nature, the specification, as noted above, named a large number of the members of that class, all of which are typical of the protective agents suggested to be employed by the patentee. None of the classes of alkaloids or colloids were shown to be inoperative.

A later application of the same negative rule laid down in the *Incandescent Lamp* case, supra, is found in *Corona v. Dovan,* 276 U.S. 358, from which we quote (page 385):

> "Moreover, the experts show that there are between fifty and one hundred substances which answer this description, of which there is quite a number that are not accelerators at all. Weiss could certainly not claim the entire group of such compounds. He makes no showing that there is any general quality common to disubstituted guanidines which makes them all effect as accelerators.

*Note language p. 475 of *Incandescent Lamp* case.

Claims for their exclusive use cannot therefore be sustained. This is shown by the decision of this Court in the Incandescent Lamp Patent, 159 U.S. 465, where the court said, at page 475:

" 'If, as before observed, there were some general quality, running through the whole fibrous and textile kingdom, which distinguished it from every other, and gave it a particular fitness for the particular purpose, the man who discovered such quality might justly be entitled to a patent; but that is not the case here.' "

VI.

EXTENT OF PROPORTIONS OF CHEMICAL INGREDIENTS NEED NOT BE SET OUT WITH PARTICULARITY WHEN SOME SPECIFIC AND DEFINITE RULE OF DETERMINATION IS MADE AVAILABLE TO THE EXPERT OR MAN SKILLED IN THE ART.

The Appellate Court has insisted here that proportions of ingredients must not only be stated with exactness in the specification, but claimed in the claims, ignoring the fact that the disclosures are addressed to those "skilled in the art" and that the claims are to be read in the light of the specification.

On the other hand this Court (e. g., in *Seabury v. Am Ende,* 152 U.S. 561) as well as other Circuit Courts have held that such details are not essential, where the specifications are otherwise clear to those "skilled in the art" (e. g., *Douglas Pectin Co. v. Armour Co.,* 27 F.(2d) 814, 817 (2 C.C.A.)).

Re Seabury v. Am Ende, 152 U.S. 561, 566-67. The claim there read:

> " 'The borated cotton, being cotton-fibre which is saturated with boracic acid and glycerine, substantially as herein shown and described.' "

In overruling the defense of indefiniteness, the Court said:

> "The first ground of defense relied on is that the patentee has failed to describe his invention in such full, clear, and exact terms as to enable persons reading the description of the invention to construct and use it; and it is contended that the strength of the boracic acid solution is not prescribed, nor the **precise proportion** of glycerine. In considering this objection it must be remembered that the description is **addressed to persons skilled in the art** to which it relates. The solution of boracic acid is referred to, not as anything new, but as an article well known to druggists and physicians, and when the patentee says that he 'prepares a solution of boracic acid in the usual manner', he means as it has formerly and customarily been prepared. When he directs that a small proportion of glycerine shall be added, it is obvious that the quantity of the glycerine is to vary with the amount of cotton and boracic acid used, but that the merits of the invention will not depend on whether, in a given case, a little more or less glycerine is used. Such general directions are common in the arts, as appears in some of the very publications introduced by the defendant to show anticipation.
>
> * * * * * * *
>
> "We, therefore, agree with the court below in thinking that 'an intelligent chemist, setting out

properly to combine the enumerated ingredients into which the cotton is to be immersed, and with which it is to be impregnated, could hardly go astray.' It is also to be observed that neither the defendant, in making the infringing article, nor the several witnesses of eminence in the medical profession, who testified to the practical value of the patented dressing, seem to have had any difficulty in understanding and applying the description contained in the patent."

Re Tilghman v. Proctor, 102 U.S. 707.

The single claim there read (page 709):

"Having now described the nature of my said invention, and the manner of performing the same, I hereby declare that I claim, as of my invention, the manufacturing of fat acids and glycerine from fatty bodies by the action of water at a high temperature and pressure."

Despite the fact that neither the "degree of heat" nor the "amount of pressure" were stated, the Court upheld the claims (page 729):

"* * * he claims as his invention **'the manufacturing of fat acids and glycerine and glycerine from fatty bodies by the action of water at a high temperature and pressure.'** The true construction of this claim is to be sought by comparing it, as we have already done, with the context of the specification; * * *" (emphasis by the Court).

And at page 730, after quoting from the specification:

"This is the process which the patentee claims to have invented; and this description of it gives

the proper construction and qualification to the claim."

Re Eibel Co. v. Paper Co., 261 U.S. 45.

That case is recognized as a leading case on the subject of sufficiency of patent claims. There the Circuit Court of Appeals for the Second Circuit had found the claims "too vague because the extent of the factor of pitch is not defined except by the terms 'substantial' and 'high' " (page 65).

This Court overruled the defense and found the claims sufficient for "readers who were skilled in the art of paper making and versed in the use of the Fourdrinier machine".

Further said this court:

"Expressions quite as indefinite as 'high' and 'substantial' in describing an invention or discovery in patent specifications and claims have been recognized by this Court as sufficient" (citing among other cases *Tilghman v. Proctor,* 102 U.S. 707, and *Rubber Co. v. Goodyear,* 9 Wall. 788, 794).

Likewise the rule announced by the Ninth Circuit Appellate Court is at variance with the Courts of other circuits.

Haynes Stellite Co. v. Chesterfield, 22 F.(2d) 635 (6 (C.C.A.),

related to a patent on an alloy of cobalt, chromium and tungsten, in which the Court said (page 636):

"Haynes' specification shows that the invention in its broadest aspect consisted in uniting

cobalt with any two of the metals of the chromium group. This group was said to comprise chromium, tungsten, molybdenum, and uranium. The specification gives particular attention to chromium and tungsten, and claim 8 calls for 'a metal alloy composed of cobalt, chromium, and tungsten in the proportion of from 5 per cent to 60 per cent of tungsten, the remainder of the alloy being cobalt and chromium.' "

In *Douglas Pectin Corp. v. Armour & Co.,* 27 F. (2d) 814 (2 C.C.A.), the claims in question read as follows (page 816):

"2. The process of making jams or conserves consisting in adding to crushed fruit and sugar a concentrated pectous solution, heating the mass **sufficiently** to sterlize it without producing evaporation by prolonged boiling, and subsequently allowing the mass to cool.

"5. The process of making fruit jellies, consisting in adding to fruit juice a **given quantity** of sugar and a **proportional quantity** of concentrated fruit pectins **sufficient** to jellify the mass without prolonged boiling."

In reversing the lower Court and holding the claims sufficient, the Court said, after quoting brief excerpts from the patent (page 817):

"That is a sufficient direction for practical dealing with the ingredients, and teaches any one skilled in the art how to proceed. It is enough that the patent tells us that with concentrated pectin a cold jelly can be made."

The patents there were upheld even though some experimentation or tests might be needed before putting their teachings into practice.

Re Polygon Products Corp. v. Kant-Rust Products Corp., 292 Fed. 569 (3 C.C.A.).

One of the two claims held valid and infringed, as shown by the lower Court's opinion (291 F. 703), was:

> "5 A penetrating adhesion freeing compound for releasing rust films between adherent surfaces, comprising a volatile, penetrating, colloidal solvent having a volatilization retarding colloid in colloidal solution within it, said **colloid having a lubricative character while in colloidal solution in the penetrating solvent, said colloid having also the property of retarding volatilization of the solvent** while in solution therewith."

This Court will note that these are "colloid" claims, in broad language, and definitely specified "characteristics" (i. e., functions), and were held good on the very grounds that the Ninth Circuit Court says are not good.

In upholding the claims that distinguished Appellate Court said (pages 569-70):

> "Of course, the self-penetrating power of oils was always recognized as an aid in unscrewing rusted bolts and nuts, but the fact remained that the physical force of the wrench, tongs, chisel, and hammer was the used method. Into this field of the metal art, as we view it, Abbott, an experienced chemist, in making his invention, brought into practical, commercial, and novel use the **science of colloidal chemistry**, which, though theoretically known for some years, has only of

late been practically applied to the metal and clay arts",

and at page 572:

"Our conclusion in that regard is that its compound and process comprise three elements: First, a penetrant, which, in this case is coal tar oil; second, a **colloid,** which is graphite; and, third, a lubricating oil. These elements, penetrant, **colloid,** and lubricant, each embody the character of the penetrants, **colloids,** and lubricants specified in the claim quoted, and answer to the several descriptions thereof previously quoted herein from the specification, and they all act in and upon and with each other to plasticize and break down the rust binder in joints, nuts, and the like. The objection that some of these elements are not mentioned in the specification carries no weight."

General Electric Co. v. Nitro Tungsten Lamp Co., 266 Fed. 994.

This is on the famous tungsten lamp patent, a typical claim (No. 12) of which read as follows (page 995):

"In an incandescent lamp, the combination of the lamp bulb, a tungsten filament therein, and a gaseous filling, the effective diameter of the filament being **sufficiently large** and the heat conductively of the filling being **sufficiently poor** to permit the lamp to be operated with a filament temperature in excess of that of a vacuum tungsten lamp operating at an efficiency of one watt per candle and with a length of life not less than that of such a lamp" (emphasis ours).

In overruling the defense of indefiniteness the Court said (page 1000):

> "Nor is it perceived that any claim before us is open to the charge of indefiniteness. On the contrary, if such a claim as that originally suggested and above quoted had been allowed, it would surely have been accused of attempting 'to corral the art by the use of comprehensive indefinite terms', and to 'foreclose broadly against the future'. Kintner v. Atlantic, etc., Co. (D.C.), 249 Fed. at page 77. We reassert the statement of Eibel, etc., Co. v. Reminbton, etc., Co., 234 Fed. at page 632, 148 C.C.A. 390, that it is well not to attempt definition, but to **consider the alleged indefiniteness of a claim in the light of the facts of each particular case.** On the present facts, it is clear that it was (1) impossible to define the parts of Langmuir's lamp in millimeters or other dimensional units; and (2) no such effort was necessary to instruct the skilled man how to make the lamp of the patent.
>
> "It was impossible to give exact measurements, because the economic object of the lamp was to diminish the wattage per candle, and dimensions must be proportioned to the designed wattage; i. e., substantially to the size of the lamp—something to be worked out according to rules presumably long familiar to a competent electrical engineer. **It was unnecessary to do more than state the limits of invention in terms of result,*** because the results desired are not functional, and do indicate limits in terms of lamp life and candle

*Apparently the Circuit Court of Appeals for the Ninth Circuit confused "function" and "results accomplished".

The "function" of the colloid was to act as a protective covering; the "result" was to release the poison at the right time.

power which are likewise presumably quite familiar to any competent electrician. When a claim defines achievement in words no broader than the disclosure, and in phrases which, as interpreted by competent workers in the art, tell one how to do what the patentee did, it can rarely be called indefinite."

Re General Electric Co. v. Mallory, 298 F. 579 (2 C.C.A.) (certiorari denied 266 U.S. 609, 69 L. Ed. 466).

As showing both how the Circuit Court of Appeals for the Second Circuit which disagreed with the Ninth Circuit Court in *General Electric v. Wabash,* and how this Court distinguished between claims for similar subject matter, as to definiteness and indefiniteness, we need only refer to the *Mallory* case above, where one of the claims in issue, which was sustained, reads as follows:

"12. In an incandescent lamp, the combination of the lamp bulb, a tungsten filament therein, and a gaseous filling; the effective diameter of the filament being **sufficiently large,** and the heat conductively of the filling being **sufficiently poor,** to permit the lamp to be operated with a filament **temperature in excess** of that of a vacuum tungsten lamp operating at **an efficiency** of one watt per candle and with a **length of life** not less than that of such a lamp."

(For this claim see the so-called *"Nitro-Tungsten* case", 261 Fed. 606, cited in preface to *Mallory* case, page 580.)

In sustaining the claim, and after observing (page 582) that judges sit "not as scientists but as weighers of evidence", Judge Hough went on to say (page 587):

> "There is much rediscussion of filament diameters, but its applicability to the claims in suit centers around the patentee's phrase of 'effective diameter'. What Langmuir saw, and we still think he was the first to see it, was that the filament for a gas-filled lamp must be large, which involved the use of a large wire. But he also saw that it was possible, by coiling, to make a reasonably fine wire (which in other respects was desirable) act like a large wire. Thus he produced a filament of effective size, which on dissection can by certain quibble or play upon words be called a fine wire.
>
> "* * * **The point is that, while critics may point out, and have pointed out, indefiniteness in language, the practical man acquainted with the art has been proven perfectly able presumably to use the patent in making what Langmuir's assignees made first, witness the multitude of infringements productive of litigation. Patents often lend themselves to fine-spun theories; but it is singular how plain they are, if they are worth anything, to the man who wishes to infringe for profit.**"

Re Allen Filter Co. v. Star Metal Mfg. Co. et al., 40 F.(2d) 252 (3 C.C.A.) (certiorari denied, 282 U.S. 848).

In reversing the lower Court and sustaining the claims, the Court said (page 254):

"Nor is patentability defeated because the boundary line between coils coming within the patent and those falling outside it is not marked with equatorial precision. It would have been difficult, if not impossible, to mark it more definitely. It is as fixed and certain as was the boundary in Van Heusen Products v. Earl & Wilson (D.C.), 300 F. 922. It is sufficiently obvious to enable those skilled in the art to locate it. The law requires nothing more. Eibel Co. v. Paper Co., 261 U.S. 45, 43 S. Ct. 322, 67 L. Ed. 523. We think the claims are valid."

THE NINTH CIRCUIT COURT OF APPEALS AT VARIANCE WITH ITS OWN DECISIONS ON THE SAME SUBJECT.

Thus this same Court, only a few months previously, but with a different group of judges, decided almost the contrary of the ruling here, and upheld a chemical composition patent despite the admitted indefiniteness of the patent there, although understandable "to teach the process to those familiar with the art".

We refer to the case of *Research Products Co. v. Tretolite Co.,* 106 F.(2d) 530, 533, where the Ninth Circuit Court of Appeals ruled that the question as to whether or not the descriptions of the chemical agents, given in the patent, to be used, and the manner of use, are sufficiently clear and definite to be understood and applied by **those engaged in the art of organic chemistry,** is a question of fact "to be ascertained by the evidence of experts * * * and that a finding of fact on the matter * * * is entitled to great weight and only to be disturbed if clearly wrong."

The same defenses made here were made there, but overruled, and the patent upheld, although the claims there were no more definite than these claims, and furthermore, the workableness of some of the substances in the claims was more than doubtful.

VII.

THE RULE AS TO FUNCTION.

Thus said this Court in the case of *Holland Furniture Co. v. Perkins Glue Co.,* 277 U.S. 245, 72 L. Ed. 868, 873:

> "* * * the attempt to broaden product claims by describing the product **exclusively** in terms of its use or function is subject to the same vice as is the attempt to describe a patentable device or machine in terms of its function. As a description of the invention it is insufficient and if allowed would extend the monopoly beyond the invention. See Bene v. Jeantet, 129 U.S. 683, 32 L. Ed. 803, 9 Sup. Ct. Rep. 428; Cochrane v. Badische Anilin & Soda Fabrik, 111 U.S. 293, 28 L. Ed. 433, 4 Sup. Ct. Rep. 455; Re Incandescent Lamp Patent, supra; Matheson v. Campbell, 24 C.C.A. 384, 45 U.S. App. 473, 557, 78 Fed. 910; American Adamite Co. v. Mesta Mach. Co. (C.C.9. 3d), 18 Fed. (2d) 538."

We have already shown that this Court has said, in *General Electric v. Wabash,* supra, at page 371, that "a limited use of terms of effect or result which accurately define the essential qualities of a product to one

skilled in the art, may in some instances be permissible and even desirable".

Nevertheless the Ninth Circuit Appellate Court denies any use of functional language in a patent claim.

To embellish the description of a thing by an accurate statement of what it does is always recognized as helpful to the understanding of the thing itself.

It is not that reference in a claim to function bans the claim; but a **functional reference may not be ignored** in claim construction or in passing on infringement. *Thomson Meter Co. v. National Meter Co.*, 106 F. 519; *Computing Scale Co. v. Keystone Co.*, 88 Fed. 788, 791; *McKee v. Noonan*, 86 F.(2d) 986.

VIII.

THE PATENT OFFICE PRACTICE.

The long prevailing practice in the Patent Office as to "generic" and "specific" claims, represented by the claiming of a "class" as distinguished from claiming merely a "species" or an individual member of the class, is something that ought not readily to be upset or ignored.

THE RULE IN CHEMICAL CASES.

Thus we have the following pronouncement of practice in the Court of Customs and Patent Appeals, in *In re Walker*, 70 F.(2d) 1008, at 1011:

> "It is true, as argued by counsel, that appellant is entitled to claim not only the substance

> enumerated by him in his specification, but also their equivalents. However, in cases of this character, involving chemicals and chemical compounds, many of which of course differ radically in their properties, it must appear in the specification, either by the enumeration of a sufficient number of the members of a group or by other appropriate language, that 'the chemicals or chemical combinations included therein were generally capable of accomplishing the desired result.' See In re Ellis, 37 App. D.C. 203; In re Dosselman, 37 App. D.C. 211; In re Langmuir, 62 F.(2d) 93, 20 C.C.P.A. 733."

In *In re Soll,* 97 F.(2d) 623, they made the rule even plainer by showing the negative of it:

> "We think the rule is well settled that in a chemical case where an applicant discloses that one species of a class of chemicals will accomplish a certain purpose without naming any others of the class to which it belongs or without so describing the species and its mode of operation as to call attention to the fact that other members of the class are its equivalents and will perform the same function, he is not entitled to broaden the scope of his disclosed invention by claiming the whole group, even though those skilled in the art may know that in some respects at least the different members of the group are equivalents."

The Board of Appeals decisions are illustrated by the following:

In *Weber,* 2 USPQ 188, the Board said:

> "If applicant pursues his investigations far enough to be able to say that he has tested a reasonable number of the members of a chemical

> class or group and finds that they act in the same way he may be entitled to a claim of such scope as to cover that class."

In *Williams and Neal,* 39 USPQ 125, it was held that a disclosure intended to be generic but mentioning as illustrative a large number of substances from the various classes and groups is as extensive as can reaonably be expected to support generic protection. The claims in that case were held to come within the disclosure.

The Board of Appeals stated the following in *Doan,* 41 USPQ 591:

> "We do not feel that appellant's failure to mention specifically the inert gases other than argon in any way detracts from the generic character of the disclosure. Where an application contains a definite statement with respect to the suitability of a class of materials, we regard it as unimportant that the various materials of the class are not specifically mentioned. If the tenor of an application as a whole is generic, it cannot be made less so by the fact that only one or a few species are specifically mentioned."

Singularly enough, this rule was applied in the instant case involving the Turnbow patent (at the time its application was in interference with that of Lindstaedt), as seen by the File Wrapper, Exhibit 3*b*, Paper #17, when the propriety of claiming the class broadly by disclosure of one representative member thereof was established in a decision by the Examiner of Interferences during the pendency of the Turnbow application.

In sustaining Turnbow's contention, the Examiner said:

> "Counts 5, 6 and 7 (claim 1, 2, and 3 of Lindstaedt) are broader than count 3 in that they are not limited to agar-agar but include other colloidal substances that may be used in place of agar-agar. The Lindstaedt motion to dissolve urges that the Turnbow application does not support these broader claims because it discloses only agar-agar as the colloidal substance. (p. 2.) * * * Counts 5, 6 and 7, however, are limited to colloidal substances, i.e., substances having properties similar to those of agar-agar. Since the function of the agar-agar is merely that of an absorbent for carrying the toxic substance through the upper alimentary tract, it would seem obvious that other similar colloidal materials could be used for this purpose. **Under such conditions the disclosure of one representative member of a group is sufficient to entitle an applicant to claim the group.** Accordingly, the Lindstaedt motion to dissolve as to counts 5, 6 and 7 is denied." (page 3.)

Although priority as to claim 6 (Claim 2 of Lindstaedt) was later conceded to Lindstaedt the important point to be noted is that Turnbow was broad enough in his disclosure to cover not only agar-agar but also, as he expressly stated, products of the nature of agar-agar.

CONCLUSION.

The only guide that the Patent Office has in the granting of patents is that afforded by the statutes and the interpretations of those statutes by this and other Courts of competent jurisdiction.

If the novel rule here laid down by the Ninth Circuit Court of Appeals that generic claims are not permissible in a chemical case is allowed to stand, then and to that extent that decision undermines the whole patent system. This case is of great public interest and importance to the chemical industries, and to the holders of thousands of meritorious chemical patents in general.

If allowed to stand as the law this rule will render void an infinite number of valuable chemical patents, whether already held to be valid or whether as yet unlitigated. The public interest and the interest of commerce and industry, in operating under the patent system, necessarily require that such law, being entirely new and at variance with all precedent, be made final only when all factors and consequences are thoroughly considered.

We respectfully submit that for the reasons stated the petition for writ of certiorari filed herein should be granted.

Dated, San Francisco, California,
September 4, 1940.

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(Appendices "A" and "B" Follow.)